The Actuarial Profession
making financial sense of the future

Current Issues in Pensions
Marcus Hurd, Aon Hewitt

Effective decisions
Understanding biases

Heuristics

The way in which we make decisions

System 1 (intuition) Fast Automatic Implicit Emotional	**System 2** (logic) Slower Conscious Effortful Explicit

Kahneman, 2003, Bounded rationality

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Bounded rationality

Real world simplification

Kahneman, 2003, Bounded rationality

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Purpose of trustee / sponsor / member decisions

- The world we view
  - To help stakeholders make better decisions?
  - To help stakeholders be happier with our decisions?
  - To help others be happier with our decisions?

- The world we want others to view
  - To help others to make better decisions?
  - To help others make a certain decision?
  - To help them be happier with our decisions?

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Certainty: estimating probabilities

- Individuals prefer certainty … link to confidence

- Individuals struggle to estimate probabilities

- Examples
  - Confidence intervals
  - False negatives
  - DNA

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Overconfidence

- Individuals overestimate their own ability

- Effect less with experts

- Self-awareness linked with low self-esteem(!)

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Game

- I'm thinking of a number rule
- I will answer yes/no
- What is my yes/no number rule?

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Game: Confirmation bias

- I'm thinking of a number rule
- I will answer yes/no
- What is my yes/no number rule?

- The rule is non-primes

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

- Most individuals and groups only seek confirmatory evidence

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Framing / loss aversion

There is an outbreak of an unusual disease and two vaccinations exist:

(a) Vaccination A will save 200 people

(b) Vaccination B provides a 1/3 probability of saving 600 people

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Framing / loss aversion (2)

There is an outbreak of an unusual disease and two vaccinations exist:

(a) If Vaccination A is adopted, 400 people will die

(b) If Vaccination B is adopted, then there is a 2/3 probability that 600 people will die

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Framing / loss aversion (3)

- Lots of ways to ask the same question

- Frame the same question differently

- Trustee group dynamics – the pessimist

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Framing

Primacy theory --------- Intermediate theory --------- Recency theory

← Use of ranges →

- Availability – overestimate likelihood
- Anchors
- Mentalism and the power of suggestion

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Transactional utility

- You are on the beach in the sun and would like a beer
- Your honest friend calls

- How much are you willing to pay the fancy hotel?

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Transactional utility

- You are on the beach in the sun and would like a beer
- Your honest friend calls

- How much are you willing to pay the fancy hotel?

- What if, instead, they are passing a grocery store?

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Transactional utility

- Emphasis on value and outcome

- Remove personalities (?)

- When is it wrong to pursue a "value" opportunity?

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Value of possession

- FA Cup final …sold out
- Current ticket price would have been £50.

- How much are you willing to pay for ticket?

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Value of possession

- FA Cup final …sold out
- Current ticket price would have been £50.

- How much are you willing to pay for ticket?

- What if, instead, you already have a ticket.
- How much are you willing to sell it for?

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Value of possession

- Psychology of ownership

- Backing your own decision

- Importance of loyalty – psychological contract

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Do no harm / omission bias / status quo

- Who feels worse? …

  (a) Paul owns shares in company A, and considered switching to B, and would have been £1,200 better off if he had, but he didn't.

  (b) George owns shares in company B, and did switch to company A and so finds he would have been £1,200 better off if he hadn't have switched.

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Do no harm / omission bias / status quo (2)

- Do no harm
- Don't make mistakes
- Don't fix it if it isn't broken
- Not punished for missed opportunities

- What happens when opportunities are rewarded?
- Decision frameworks to reward effective decision making
- Decision frameworks to promote risk management
- Examples: Finishing a PhD, pharamceuticals

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Question …

- Purpose of understanding decision making:

  (a) To make better decisions?
  (b) To be happier with the decisions you have made?
  (c) To show you made a sensible decision?

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Summary

- Heuristics
- Awareness
- Be clear of your objectives
- Understanding likely biases
- Helping others understand biases

Credits

Bazerman, M (2005)

Judgement in Managerial Decision Making

John Wiley and Sons

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